January 27, 2005

## **MEMORANDUM**

TO: State Agencies That Award Large Public Works Contracts

FROM: Division of Facilities Management

SUBJECT: Energy and Life Cycle Cost Legislation

The Governor signed legislation on August 19, 2004, that affects how the State purchases equipment and contracts for public works projects. These changes encourage State agencies to efficiently use energy and are part of the Governor's Livable Delaware program. The two bills were House Bill 435 – Energy Star, and Senate Bill 307 – Life Cycle Costing. The updated information can be found in the <u>Delaware Code</u>, Title 29, Chapter 69.

HB 435 requires State agencies to use products and equipment designated as "Energy Star" products by the U.S. Governmental Protection Agency and the U.S. Department of Energy. For more information on Energy Star, please see <a href="http://www.energystar.gov">http://www.energystar.gov</a>. Energy Star equipment is required unless: it is not available competitively, it is not available in a reasonable timeframe, or it doesn't meet performance criteria of the agency. For public works projects, the architect or engineer must specify Energy Star products in the specifications and bid documents. Exceptions to the use of Energy Star equipment must be submitted to the Secretary of Administrative Services for approval.

SB 307 requires the use of life cycle cost analysis in the purchasing of equipment and in public works projects. This analysis must include the cost of acquisition, cost of energy consumption required for operation, the cost of maintenance, and the cost of consumables that affect the overall cost of ownership. The contracting agency shall require the project architect or engineer to perform the life cycle cost analysis. Based on this analysis, the project specifications shall require the systems or design elements with the lowest cost of ownership.

Although the legislation is not specific on systems and design elements to be included in the life cycle cost analysis, we suggest the following: building envelope materials and systems (to include walls, insulation, roofing, windows and glazing, doors), mechanical including heating, ventilation, air conditioning equipment and related systems, and electrical equipment (lighting, generators, transformers, power distribution). The time period used in the analysis should correspond with the predicted lifespan of the equipment. As a default value, 20 years (the timeframe for most State capital improvement bonds) should be used.

These changes are to be implemented on all projects and solicitations begun on February 15, 2005, or later. If you have any questions, please contact Mark A. DeVore, P.E., Chief of Engineering and Operations at (302) 739-5644.

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cc: Robert J. Furman, Director